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displaying parts which are obtained by the searching step as search results, in order based on the reference number.

19. (Amended) A program product comprising, computer readable instructions and a recording medium bearing the computer readable instructions; the instructions being adaptable to enable a computer to operate according to the steps of:

storing, for each part of an electronic manual, a reference number expressing [the number of] how many times the part is referred to by a user;

searching contents of the parts based on a search condition[;], wherein the
searching searches contents of each part in order based on the reference number;
and

displaying parts which [are resulted] result from the searching step, in order based on the reference number.

REMARKS

Claims 1, 3-10, and 12-19 are pending in the application.

As to the above amendment to Claim 1 reciting "wherein the search process unit searches contents of each part in order based on the reference number," and to independent Claim 10 reciting "wherein the searching step searches contents of each part in order based on the reference number," see, e.g., original claims 2 and 11. A corresponding amendment has been made to independent Claims 14, 18 and 19. Claims 2 and 11 have been canceled without prejudice, and affected dependent claims have been amended as to their dependency.

The claim amendments herein are for simplicity, to reduce the number of embodiments and aspects of the invention being communicated-about in this application, and without prejudice to other embodiments and aspects of the invention being presented in another application.

At page 2, paragraph 1 of the Office Action, Claim 15 has been objected to, as needing to depend on claim 14 not claim 13. Above, Claim 15 has been

amended as requested by the Examiner, and the objection is thereby obviated.

At page 2, paragraph 3 of the Office Action, Claims 1, 3-5, 7-8, 10, 12, 14-16 and 18-19 have been rejected under 35 U.S.C. 102(e) as anticipated by Ishimaru (USP 6,427,155). As to independent Claims 14, 16, and 18-19, the parts of Ishimaru relied upon are: Figs. 2 and 10; col. 9, lines 44-67. As to independent Claims 1 and 10, the Examiner also cites col. 7, lines 64-65.¹

Applicants respectfully respond that the independent claims which are the subject of this anticipation rejection as amended above now recite the subject matter of claims 2 and/or 11, which were not rejected as anticipated. The anticipation rejection is therefore believed to be obviated, and its reconsideration and withdrawal are respectfully requested. Below, Applicants respond regarding non-obviousness.

At page 5, paragraph 5 of the Office Action, Claims 2, 6, 11 and 13 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Ishimaru, in view of Porter, Jr. et al. (USP 5,263,160). At page 5, paragraph 6 of the Office Action, Claims 9 and 17 have been rejected as being obvious over the same Ishimaru and Porter combination. These rejections are traversed.

The Examiner admits that Ishimaru does not disclose a search based on the order of reference number. To allegedly supply this admitted deficiency in Ishimaru, the Examiner resorts to Porter, citing col. 1, lines 47-50.

Applicants' claimed invention of claim 1 (originally recited in claim 2, now canceled) is a certain "electronic manual search system including an electronic manual which is composed of a plurality of parts." (Amended Claim 1.) Applicants' inventive system comprises "a reference number table which stores, for each part of the electronic manual, a reference number expressing how many times the part is referred to by a user". (Applicants' Amended Claim 1.) The inventive system also comprises "a search process unit which searches contents of the parts based on a search condition; wherein the search process unit searches contents of each part in order based on the reference number". (Id., emphasis added.) Also included in the inventive system is "a search result display

¹For simplicity, we do not repeat here the Examiner's position regarding the dependent claims.

unit which displays parts which resulted from the search process unit, in order based on the reference number.” (Id.) Similarly, claim 9 requires a search process unit which searches contents of the parts for topics satisfying a search condition in order based on the reference number, and claim 17 (as amended) requires searching contents of the parts for topics satisfying a search condition in order based on the reference number.

The Examiner admits that Ishimaru does not disclose search based on the order of reference number, and resorts to Porter. However, as a threshold matter, Ishimaru and Porter are not fairly combinable, from the perspective of a person of ordinary skill in the art of Applicants’ claimed invention. Evidence of the separateness of the references is seen from the different classifications for each:

Ishimaru (issued 2002)

Int. Cl. **G06F 17/21**; G06T 3/20
U.S. Cl. **707/529**; 707/526

Porter (issued 1993)

G06F 7/22; G06F 12/00
395/600; 395/650, 400, 425;
364/251.5, 254.6, DIG.1;
340/146.2

For the later patent, Ishimaru (issued in 2002), the stated Field of Search is: 707/529, 526, 3, 1, 202, 530, 531, 532, 536; and 345/326. The patents cited on the face of Porter are from 364/200; 370/60; and 395/80. In summary, objectively speaking, Porter is separate from Ishimaru.

Nor is the Examiner’s proposed reading of Porter how a person of ordinary skill in the art would objectively read Porter. Such a person would not be motivated by Porter to modify Ishimaru. Rather, he would see the references as separate. The part of Porter on which the Examiner relies is the Background section of Porter, where Porter generally outlines certain search types, namely, “Sequential Search Method”; “Searching an Ordered Table”; and “Binary Search.” The few lines from Porter relied upon by the Examiner are from the part of col. 1 that discusses “Searching an Ordered Table.” Porter’s invention does not relate to that kind of searching. Rather, Porter’s invention relates to binary searching² and

²Porter, see, e.g., col. 4, line 68; col. 5, line 35; col. 8, line 34.

performing a sequential search.³ It is only impermissible, after-the-fact reconstruction of the claimed invention that brings the Examiner to the part of col. 1 that relates to “Searching an Ordered Table.” Considering Porter and Ishimaru, a person of ordinary skill in the art would not focus on the relied-upon lines in col. 1 of Porter, and after reading Porter would lack motivation to modify Ishimaru.

Also, the Examiner apparently is treating the “record keys” of Porter, col. 1, line 49, as the same as the mark numbers 7w-2 in Fig. 10 of Ishimaru. Part of Fig. 10 of Ishimaru shows:

| WORD | MARK NUMBER |
|-----------|-------------|
| construct | 1 |
| book | 20 |
| trouble | 14 |
| despite | 7 |

In Ishimaru, the mark number is a function of how many times the user marked the word. As words become more heavily marked, the color in which they are displayed changes, as seen in Ishimaru Fig. 4, showing mark number 7C-1 and color 7C-2:

| MARK NUMBER | COLOR |
|-------------|--------|
| 10 | YELLOW |
| 20 | RED |

The point of Ishimaru is that, once a word has been marked at a first certain incremental level (such as 10 times), rather than it being displayed “regularly” it is highlighted (such as in yellow highlighting), and when it is marked more heavily at a next incremental level (such as 20 times), it is then highlighted more (such as in red).

Porter provides no useful disclosure or teaching relative to the system of Ishimaru.

Porter does not relate to working with mark numbers or anything akin to Ishimura’s mark numbers. Porter assumes a search method that accepts an argument “a” and tries to find a record whose key is “a”. (Porter, col. 1, lines 14-15.) Porter explained that the simplest form of such a search is the sequential

³Porter, col. 8, line 35.

search, which examines each key in turn, and upon finding one that matches the search argument, its index is returned. (Porter, col. 1, lines 26+.) In the passage cited by the Examiner, Porter continues:

<<If the table is stored in ascending or descending order of the record keys, there are several techniques that can be used to improve the efficiency of searching. This is especially true if the table is of fixed size. One advantage in searching a sorted file over searching an unsorted file is in the case where the argument key is absent from the file. In the case of an unsorted file, n comparisons are needed to detect this fact. In the case of a sorted file, assuming that the argument keys are uniformly distributed over the range of keys in the file, only $n/2$ comparison (on the average) are needed. This is because we know that a given key is missing from a file which is sorted in ascending order of keys as soon as we encounter a key in the file which is greater than the argument.>> (Porter, col. 1, lines 48-61.)

That is, the lines of Porter on which the Examiner relies teach only about the case where an argument key (record key) is absent, as is seen a few lines down from the lines cited by the Examiner.

Porter would be of no use to a person of ordinary skill in the art reading Ishimaru. Even with Ishimaru and Porter, such a person still would not have achieved Applicants' presently claimed invention. Porter is predicated on a search method that accepts an argument "a" and tries to find a record whose key is "a". In Ishimura, there is no searching for words with a mark number of 10 or a mark number of 20. Rather, the point in Ishimura is how to more prominently display a word as a function of how much marking it has received. The objectives in Ishimura and Porter are different and non-combinable.

The above remarks also apply to the other rejected claims. In view of the above, reconsideration and withdrawal of the obviousness rejections is respectfully requested.

In view of the foregoing, it is respectfully requested that the application be reconsidered, that claims 1, 3-10, and 12-19 be allowed, and that the application be passed to issue.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephone or personal interview.

A provisional petition is hereby made for any extension of time necessary for the continued pendency during the life of this application. Please charge any fees for such provisional petition and any deficiencies in fees and credit any overpayment of fees to Attorney's Deposit Account No. 50-2041.

Respectfully submitted,



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